

G. tenerrima. Except for a subspecies of *G. leptalea* the leaves are all linear-filiform and entire. Of these species only *G. leptalea* needs special consideration here.

GILIA LEPTALEA subsp. *pinnatisecta* subsp. nov. Speciei simili autem foliis pinnati- vel laciniati-lobatis aut dissectis, planta totus saepe glandulosus-viscidus.

Similar to the species but the leaves pinnately to laciniately lobed or dissected, and the whole plant often glandular-viscid. North Coast Ranges, Lake County to Humboldt County, California; San Marcos, Brandegee (Santa Barbara County?).

Type. Open ground about Whispering Pines resort, Lake County, California, *Baker 2299a* (Herb. Univ. Calif. 353868).

GILIA LEPTALEA subsp. *bicolor* subsp. nov. Speciei simili autem jugulus flavus tubo subaequantibus.

Similar to the species, but the throat subequal the tube and yellow. Canadian zone; central Sierra Nevada, California.

Type. Dardanelle, Tuolumne County, California, *Alexander & Kellogg 3736* (Herb. Univ. Calif. 702227).

Subgenus *Tintinabulum* (Rydberg) comb. nov.

Tintinabulum Rydberg, Fl. Rocky Mountains, pp. 698 and 1065. 1917.

In view of the close relationship between the single species of this subgenus with the entire linear-leaved members of the subgenus *Kelloggia* it seems scarcely necessary to recognize *Tintinabulum* of Rydberg as a genus. It would stand only on the open campanulate yellow corollas of *Gilia filiformis*. There are occasional colonies with cream colored flowers.

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LITERATURE CITED

- International Rules of Botanical Nomenclature. 1935.
 LIEBIG, J. 1843. Chemistry in its relation to agriculture and physiology. Third edition.
 LINDLEY, J. 1836. Botanical Register. London.
 MASON, H. L. 1945. The genus *Eriastrum* and the influence of Bentham and Gray upon the problem of generic confusion in Polemoniaceae. *Madroño* 8: 65-91. 1945.

POTAMOGETON LATIFOLIUS IN TEXAS

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In June, 1945, my attention was attracted by an abundant growth of an unfamiliar *Potamogeton* in the outlets of springs about Fort Stockton, in western Texas. When Dr. William T. Winne and I began to collect some of these specimens for pressing, it became apparent that we had a robust species belonging to

the subgenus *Coleogeton*. A series of specimens brought back to the herbarium at Cornell University was determined as *Potamogeton latifolius* (Robbins) Morong, only after considerable study.

Potamogeton pectinatus var. *latifolius* Robbins (in S. Watson, Botany Kings Expl. p. 338. 1871) was described from material collected in running brackish waters of Humboldt River below Humboldt Lake, Nevada (*W. W. Bailey 1142*).

Potamogeton latifolius (Robbins) Morong (Mem. Torrey Bot. Club 32: p. 52, 1893) is based on the description of Robbins as amplified by Morong from fruiting material collected by Mrs. R. M. Austin in Goose Lake in northeastern California in 1884.

The only records of *Potamogeton latifolius* that could be found are from northwestern Nevada, northeastern California and southern Oregon.

Through the kindness of its officials, I have had an opportunity to examine the following specimens of *Potamogeton latifolius* in the Gray Herbarium: NEVADA. Humboldt Lake, 1867, *Bailey 1142*; Hot Springs, Nevada desert, 1874, *Lemmon 1164*. CALIFORNIA. Mono County, 1898, *Congdon 9915*; Kings River, 1876, *Lemmon 1521*. OREGON. Goose Lake?, 1897, *Everman*.

The Fort Stockton material, in all its essential features, compares with the above specimens. Thus, the Texas station represents a considerable extension of the recorded range of *Potamogeton latifolius*.

Good material of this species appears to be rare in herbaria. The only illustration that could be located, Morong (1893), is hardly adequate to permit it to be recognized as *Potamogeton latifolius*. The following description and illustration were both based upon the Texas collection (in running water, Comanche Springs, Fort Stockton, Pecos County, Texas, June 30, 1945, *Muenschler and Winne 16516*). Specimens have been deposited in the herbarium of Cornell University.

POTAMOGETON LATIFOLIUS (Robbins) Morong. Rootstock slender, long-creeping, about 2 mm. in diameter, rooting freely at the nodes. Stems simple below, repeatedly branched above, 30–100 cm. long, the ultimate branches mostly less than 10 cm. long and bearing 1 or more spikes. Leaves linear, somewhat crisp and fleshy, the blades 2–7 mm. wide, mostly from 3 to 7 cm. long, those of the basal leaves somewhat longer and those on the ultimate and spike-bearing branches often less than 3 cm. long, green to bronze, rather opaque; leaf margin entire; apex obtuse, rounded or mucronate to acute on the upper leaves; blade with 3 nearly-equal main nerves and often with 1 or 2 smaller nerves near each margin, reticulated by prominent cross-nerves between the main parallel nerves. Stipules 8 to 12 mm. long, scarious, adnate to the leaf-base to form a sheath; ligule about 1 to 4 mm. long, hyaline along the margin, entire or becoming erose. Ped-

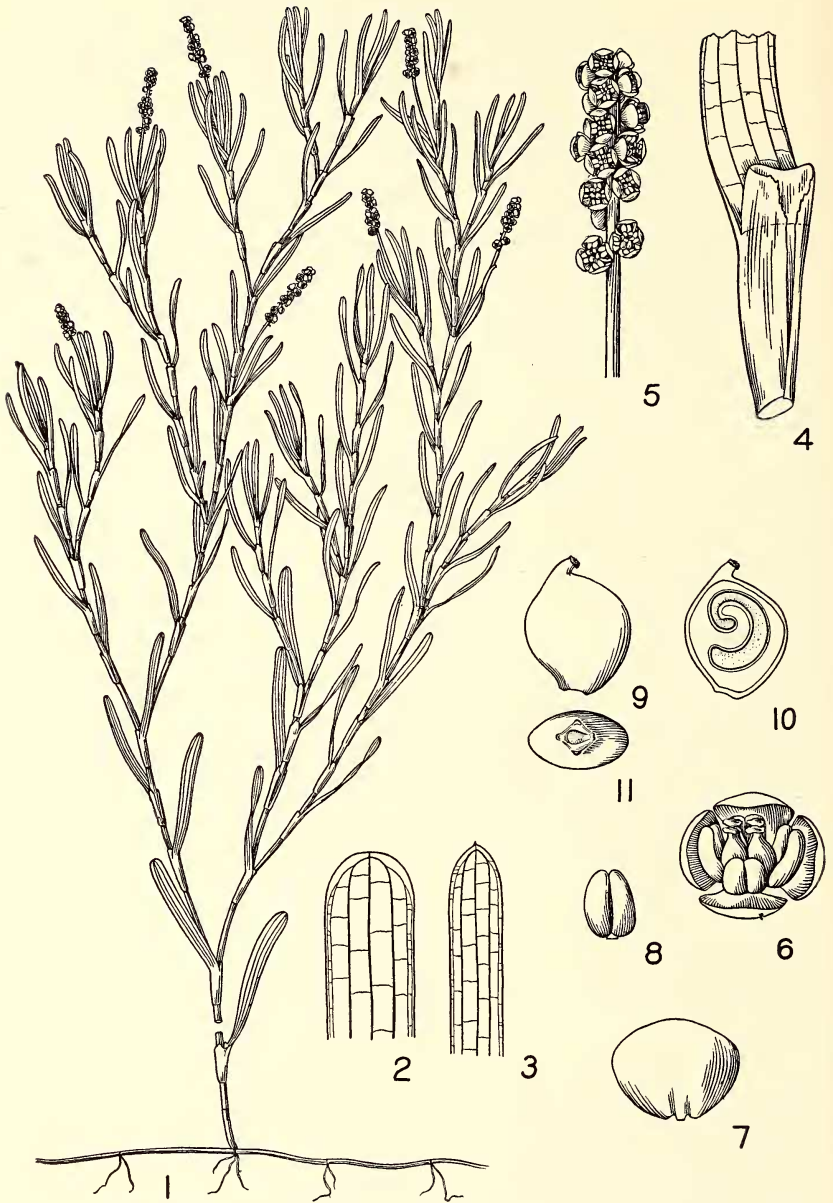


PLATE 24. *POTAMOGETON LATIFOLIUS*. FIG. 1, habit sketch; $\times 1/3$. FIG. 2, apex of lower leaf; $\times 2$. FIG. 3, apex of upper leaf; $\times 2$. FIG. 4, leaf sheath; $\times 3$. FIG. 5, spike; $\times 1$. FIG. 6, flower; $\times 5$. FIG. 7, sepaloid connective; $\times 8$. FIG. 8, stamen; $\times 5$. FIG. 9, fruit, surface view; $\times 3$. FIG. 10, fruit, vertical section; $\times 3$. FIG. 11, fruit, top view; $\times 3$. Drawn from preserved material by Miss Frieda Abbe.

uncles 2-5 cm. long, 1-1.5 mm. in diameter, tapering above, green to bronze-red. Spike 2 to 3 (4) cm. long, dense, ultimately of 4 to 6 distant nodes with 2 or more flowers at each; basal internodes 5-12 mm. long, the upper shorter. Sepaloid connectives 1-1.5 mm. high, 2 mm. wide. Pollen grains spherical to elliptical in outline. Fruits olive-green to fulvous, 4 mm. long, 3 to 4 mm. broad, somewhat compressed but the sides convex; stigma somewhat capitate but oblique, on a short stout style in fruit; beak about 1 mm. long, slightly curved. No winter buds observed although some of the ultimate branches are abbreviated and fleshy and may function as such.

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THE PLACE OF WILLIS LINN JEPSON IN CALIFORNIA BOTANY

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For three-score years Willis Linn Jepson, 1867-1946, was actively connected with the Department of Botany of the University of California as student, professor, and professor emeritus. Throughout this long period he was thoroughly devoted to the study of the flora of his native state and to furthering its interpretation and appreciation. To this end he founded the California Botanical Society in 1913, which he served as president, with the exception of three years, until 1929. In 1916 he launched the organ of the Society, *MADROÑO*, which he edited continuously through 1934. Much earlier, with the aid of E. L. Greene, he had founded and edited the journal *Erythea*.

The botanical writings of Jepson are both extensive and profound, and they have exerted a lasting influence upon our knowledge of the botany of California. The present account attempts to evaluate Jepson's lifework, as made known by these contributions, on the historical background.¹ A bibliography of authors who have named flowering plants occurring in the wild in California now includes well over 900 names! Where does Jepson stand among these?

Three stages can be recognized in the study of the California flora: (1) its study by Europeans; (2) by Americans along the eastern seaboard; and (3) by Californians. The first stage dates back to the late eighteenth century, when European explorers began to collect the objects of natural history that they found on these shores. By the early nineteenth century people in England had become greatly interested in horticulture, and expeditions were sent out to the four

¹ For sketches of Jepson, the man, giving more details of his active life, refer to (1) Herbert L. Mason in *Madroño* 9: 61-64, 1947; (2) Lincoln Constance in *Science* 105: 614, 1947; (3 & 4) Emanuel Fritz in *California Forester* 14: 6-8, 1947, and in *Jour. Calif. Hort. Soc.* 9: 23-26, 1948; (5) Marion R. Parsons in *Sierra Club Bull.* 32: 104-107, 1947; and (6) Joseph A. Ewan in *Jour. Wash. Acad. Sci.* 37: 414-416, 1947.